Tiaja insula, a New Megophthalmine Leafhopper from the Santa Barbara Channel Islands

(Homoptera: Cicadellidae)

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This paper records an interesting new species of megophthalmine leafhopper belonging to the genus *Tiaja* Oman, from Santa Barbara Island, a small, windswept member of the California Channel Islands. This is only the second addition to the genus since Oman's (1941) revision of the tribe, and with *T. arenaria* Oman (1972) brings the total number of species known to eight. This new species, *T. insula*, is the first to be recorded from the offshore islands, where it was collected from Sea Blite, *Suaeda californica* Wats. The host association appears definite because, according to R. J. Gill (personal communication) to whom I am indebted for making the material available for study, single plants were isolated and either beaten or swept to collect whatever insects were present. The species is described at this time to make the name available for use in a comprehensive biosystematic treatment of the genus *Tiaja* currently being prepared.

Tiaja insula, new species

Diagnosis: This species is intermediate in size between *T. californica* (Ball) and *T. interrupta* (Ball) with the head considerably more pointed than that of any other species of *Tiaja*. In Oman's (1941) key to the Nearctic Megophthalminae, females run to *T. californica*; males cannot be keyed at all as their genital plates and genital hooks are different from those of all other species.

Male: Length from apex of head to apex of wings 3.0–3.5 mm. Head relatively pointed; mean W/L ratio calculated from width of crown anterior to the eye divided by the length of the crown from base to apex is 2.20 (Comparable ratios for other *Tiaja* species range from 2.50 to 3.68). Color pale to medium brown with some more heavily pigmented areas on the wings; no extreme color variations present in the series examined. Aedeagus (fig. 2) stout and compact; apex short and blunt. Styles slender and tapered apically (fig. 1). Connective as illustrated (fig. 3). Genital hooks on Segment X (fig. 4) with two triangular-shaped, sharply pointed projections, one directed posterodorsally and the other directed posteroventrally. Genital hooks relatively small and inconspicuous in uncleared specimens in contrast to some other members of the genus in which genital hooks are clearly visible. Genital plates (fig. 5) large, with posterolateral

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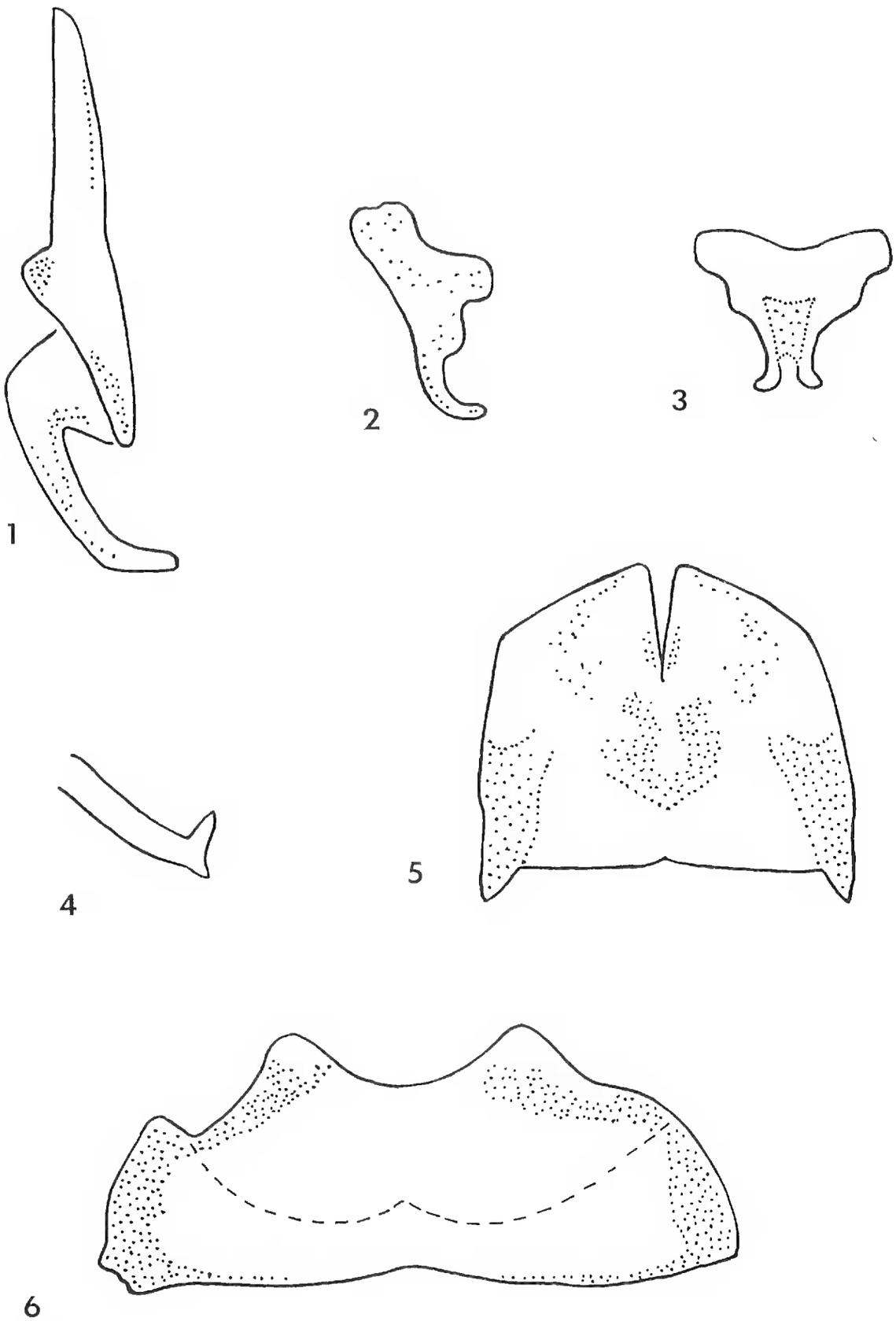

FIG. 1–6. *Tiaja insula*, genital structures. Fig. 1. Right style, dorsal view. Fig. 2. Aedeagus, left lateral view. Fig. 3. Connective, dorsal view. Fig. 4. Left genital hook, lateral view. Fig. 5. Genital plates. Fig. 6. Female seventh sternum.

margins straight and median incision slightly greater than one third the total length of the plates.

Female: Length 3.5–3.75 mm. Coloration and head shape similar to that of males. Seventh sternum (fig. 6) short with two rounded projections, one each side of a median U-shaped emargination; dorsal extension of seventh sternum (represented by a dotted line on illustration) single and highly pigmented.

Holotype male, and 6 paratypes (2 male and 4 female) from CALIFORNIA, LOS ANGELES COUNTY, SANTA BARBARA ISLAND, 6 June 1974, E. L. Paddock and R. F. Hobza. The holotype and 4 paratypes will be deposited in the California Academy of Sciences. Two paratypes will be deposited in the United States National Museum of Natural History.

Distribution: *Tiaja insula* has been positively identified only from the type locality of Santa Barbara Island. A single female specimen from San Miguel Island, a larger, more northerly member of the Channel Islands Group, probably belongs to this species.

LITERATURE CITED

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NEW JOURNAL

JOURNAL OF CHEMICAL ECOLOGY. R. M. Silverstein and J. B. Simeone, Editors. SUNY College of Environmental Science and Forestry, Syracuse, New York 13210. Published quarterly, initial issue, January 1975. $15.00 (personal), $35.00 (institutional).

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